

16618000 KAHAKULOA STREAM NEAR HONOKOHAU
(Hydrologic Benchmark Network Station)

LOCATION.--Lat 20°58'54", long 156°33'26", Hydrologic Unit 20020000, on right bank 0.5 mi downstream from Kapuna Stream, 1.3 mi south of Kahakuloa, 2.0 mi west of Puu Makawana, and 4.3 mi southeast of Honokohau.

DRAINAGE AREA.--3.47 mi².

PERIOD OF RECORD.--July 1939 to August 1943, September 1947 to November 1970, December 1974 to current year. Records for January 1913 to December 1914 (fragmentary) at site 1.0 mi upstream not equivalent owing to difference in drainage areas.

REVISED RECORDS.--WSP 1319: 1948, 1949(M). WSP 1569: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 330 ft above mean sea level (from topographic map).

REMARKS.--Records computed by Clayton Yoshida. Records good. No diversion upstream of station.

AVERAGE DISCHARGE.--53 years (water years 1940-42, 1948-70, 1976-2002), 17.7 ft³/s (12,820 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,220 ft³/s, January 28, 1988, gage height, 9.93 ft from floodmarks, from rating curve extended above 510 ft³/s, on basis of slope-area measurements at gage heights 6.70 ft, 8.48 ft, and 9.93 ft; minimum, 2.7 ft³/s, January 22, 28, 29, February 10, 12, 13, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 26	1700	*3,740	*9.85				
May 6	1345	1,130	6.73	May 13	0745	1,700	7.65

Minimum discharge, 4.2 ft³/s, Sept. 26, gage height, 1.86 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	13	9.8	6.9	11	9.7	6.8	6.4	5.2	58	16	11
2	14	8.0	11	6.2	14	8.4	6.8	6.1	5.2	16	8.7	8.0
3	13	10	7.7	15	9.0	31	6.1	7.8	5.8	17	7.4	9.4
4	32	23	7.5	6.2	7.6	30	8.5	8.5	6.0	8.4	20	8.1
5	22	66	7.9	5.7	8.7	215	7.0	40	5.2	6.9	19	6.4
6	9.5	40	7.4	5.6	7.1	131	6.0	190	5.1	6.5	8.3	6.1
7	53	81	6.7	9.4	6.6	19	9.1	40	5.1	11	14	6.1
8	9.8	151	13	6.6	62	12	7.1	74	5.4	14	7.7	11
9	7.9	81	13	5.7	16	10	5.8	44	5.0	7.4	11	9.1
10	13	18	7.9	35	8.7	9.7	5.7	41	6.2	12	8.3	7.4
11	49	14	7.3	7.9	7.7	23	5.5	21	13	8.1	13	6.0
12	10	10	19	6.1	58	9.0	5.5	12	12	6.2	36	5.7
13	19	11	79	5.7	127	8.5	5.5	158	5.9	5.7	10	5.6
14	9.4	8.9	29	5.6	73	8.1	5.3	18	5.5	5.9	8.7	5.5
15	8.0	8.0	13	5.3	21	10	5.2	10	22	5.9	6.7	14
16	14	7.4	10	5.1	13	8.1	5.1	8.4	7.0	5.7	6.2	14
17	7.5	7.1	19	7.2	10	198	63	7.5	38	9.9	5.8	8.1
18	6.4	6.7	17	39	8.9	114	12	20	9.4	7.9	6.2	11
19	6.1	6.5	25	16	8.3	15	6.7	39	7.1	39	6.2	8.3
20	6.8	6.5	12	57	9.9	10	6.4	12	6.2	11	6.6	5.9
21	7.6	6.3	11	70	8.1	8.9	6.9	8.3	6.9	46	6.0	5.5
22	8.1	6.0	7.9	67	7.2	8.2	6.2	6.9	13	24	5.7	5.4
23	6.8	5.9	8.7	11	19	7.7	6.0	6.3	7.4	16	44	5.3
24	5.8	5.9	13	8.0	90	7.5	5.8	6.0	8.8	11	42	5.2
25	5.6	5.7	7.0	7.2	37	7.1	6.2	5.8	6.2	12	16	5.1
26	5.1	5.8	7.3	317	27	6.7	6.3	5.6	8.5	122	9.6	5.1
27	25	132	6.7	51	10	6.6	7.5	5.5	11	28	16	4.9
28	151	31	6.0	24	8.6	6.6	7.9	5.4	11	18	14	4.9
29	17	9.6	9.4	171	---	6.3	37	5.2	7.2	12	24	4.8
30	9.1	9.0	6.9	22	---	11	11	5.2	15	8.6	74	4.7
31	7.9	--	23	13	---	7.4	---	5.3	--	13	17	--
TOTAL	612.4	794.3	429.1	1018.4	694.4	963.5	289.9	829.2	275.3	573.1	494.1	217.6
MEAN	19.8	26.5	13.8	32.9	24.8	31.1	9.66	26.7	9.18	18.5	15.9	7.25
MAX	49.6	51.2	37.5	71.2	50.2	133	121	54.5	28.1	34.4	37.2	40.4
(WY)	1942	1979	1955	1988	1969	1942	1989	1987	1987	1989	1957	1992
MIN	5.1	5.7	6.0	5.1	6.6	6.3	5.1	5.2	5.0	5.7	5.7	4.7
AC-FT	1210	1580	851	2020	1380	1910	575	1640	546	1140	980	432

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2002, BY WATER YEAR (WY)

MEAN	20.6	18.5	18.3	17.4	24.5	23.4	17.1	12.1	16.1	16.5	11.9
MAX	51.2	37.5	71.2	50.2	133	121	54.5	28.1	34.4	37.2	40.4
(WY)	1979	1955	1988	1969	1942	1989	1987	1987	1989	1957	1992
MIN	4.41	4.88	4.82	5.09	5.78	7.02	5.21	4.99	6.32	6.09	4.18
(WY)	1963	1985	1977	1978	1961	1992	1975	1962	1975	1976	1984

HAWAII, ISLAND OF MAUI

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SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1939 - 2002
ANNUAL TOTAL	5109.0	7191.3	
ANNUAL MEAN	14.0	19.7	
HIGHEST ANNUAL MEAN			17.7
LOWEST ANNUAL MEAN			30.8
HIGHEST DAILY MEAN	151	Oct 28	1942
LOWEST DAILY MEAN	3.9	Jul 9	11.0
ANNUAL SEVEN-DAY MINIMUM	4.0	Jul 6	1981
ANNUAL RUNOFF (AC-FT)	10130	14260	696 Mar 10 1942
10 PERCENT EXCEEDS	30	41	2.7 Jan 28 1985
50 PERCENT EXCEEDS	7.0	8.5	2.8 Feb 6 1985
90 PERCENT EXCEEDS	4.4	5.6	8.9
			5.2

